

Claims

1. Device for attaching a first part (3-5) in the form of an instrument or tool to a second part (2) in the form of a beam,
5 or such, on a working machine, comprising, on each of the parts, one engagement means fixed thereto, which are designed to be driven into engagement with each other so that the parts are thereby held attached to each other under the force of gravity on the first part, where a first (17) of the engagement means is of the male-type having external surfaces
10 converging towards each other and a second (7) of the engagement means is of the female-type having internal surfaces converging towards each other in a corresponding way to the said surfaces of the first engagement means, to receive and hold the first engagement means in the second
15 under the influence of the first part's gravitational force to push said external converging surfaces substantially in the direction of convergence against said internal converging surfaces into a fixed position in which they fit tightly together, characterized in that, it comprises an arrangement to fixedly lock the second part to the first part that is attached thereto with a recess (19) in a surface of one of the parts intended to be directed towards the other part, a wedge-like element (20) that is movably arranged on said
20 other part, means (25) for inserting the wedge element in the recess so that the wedge surfaces are pressed against the recesses walls and locking the wedge element non-movably in the recess and resilient means (24) arranged to act on the wedge element so as to press the wedge element into the
25 recess during pre-loading in said locked position.
- 30
2. Device according to claim 1, characterized in that, the wedge-element (20) is, on pressing into the recess (19), designed to fit against and influence the internal walls of the
35 recess in such a direction that the part provided with the recess is pressed with its engagement means (7) having sur-

faces converging towards each other into an engagement-making direction.

- 5 3. Device according to claim 1 or 2, characterized in that, said means comprises a controllable power means (25) for transferring the locking arrangement between an inactive position and an active position with the wedge element (20) pushed into the recess (19) and held during pre-loading.
- 10 4. Device according to claim 3, characterized in that, the locking arrangement comprises a dead centre defining means (22) connected to the wedge element (20), and that the power means (25) are designed to influence said dead centre means to transfer the wedge element from an inactive position
15 to an active position located on the opposite side of a dead centre, in which the resilient member (24) is solely responsible for holding the wedge element in the recess.
- 20 5. Device according to any of claims 1-4, characterized in that, the recess (19) is a through hole in the part in question.
- 25 6. Device according to any of claims 1-5, characterized in that, the wedge element (20) is arranged on the second part (2) and the recess (19) on the first part (3-5).
- 30 7. Device according to any of the preceding claims, characterized in that, the first engagement means has an external, substantially planar, large surface part (13) arranged to fit against an internal, substantially planar, large surface part (8) of the second engagement means in locked position to support the first part relative to the second part in the direction of these surface parts.
- 35 8. Device according to claims 7, characterized in that, said large, planar surface part on the engagement means on the first part is arranged to be directed substantially opposite to

the direction for nearing the second part to the first for said attachment.

- 5 9. Device according to any of the preceding claims, **characterized** in that, the second, female-type engagement means (7) has two opposing walls (9) that converge towards each other, which laterally restrict a channel (10) directed substantially vertically in the normal position of the first part when attached to the second part and form said converging
10 internal surfaces.
- 15 10. Device according to claim 7 and 9, **characterized** in that, both of the said converging channel walls (9) form opposing boundaries on the substantially planar support surface part (8) that forms the bottom of the channel.
- 20 11. Device according to claim 7 and 9 or claim 10, **characterized** in that, the second, female-type engagement means (7) have a planar surface part (11) lying opposite to said large, planar surface part (8) and converging towards the latter to form said converging internal surfaces together therewith.
- 25 12. Device according to claim 9, **characterized** in that, the second engagement means (7) comprises two other walls (8,11), which at least partly restrict the channel (10) and extend substantially perpendicularly relative to the firstly mentioned walls (9) and converge towards each other to form said converging internal surfaces.
- 30 13. Device according to any of the preceding claims, **characterized** in that, the second, female-type engagement means (7) has an opening (16) intended, to be turned towards the other part during the engagement operation in a direction that is substantially perpendicular to the direction of
35 convergence of this engagement means' converging sur-

faces to facilitate the insertion of the male-type engagement means (17) in the female-type engagement means.

14. Device according to any of the preceding claims, **characterized** in that, the female-type engagement means (7) is formed from a flanged metal sheet.
15. Device according to any of the preceding claims, **characterized** in that, the female-type engagement means (7) is arranged on the first part (3-5) with upwardly converging internal surfaces and the male-type engagement means (17) is arranged on the second part (2) with upwardly converging external surfaces.